Journal of Volcanology and Geothermal Research, 49 (1992) 393–394
Elsevier Science Publishers B.V., Amsterdam

Contents Volume 49, 1992

Research Papers

Sulphur eruptions at Volcán Poás, Costa Rica
C. Oppenheimer (UK) 1
Fluid-volcano interaction in an active stratovolcano: the crater lake system of Poás volcano, Costa Rica
G.L. Rowe Jr. and S.L. Brantley (University Park, Penn., USA), M. Fernandez and J.F. Fernandez (San Jose, Costa Rica), A. Borgia (Pasadena, Calif., USA) and J.Barquero (Heredia, Costa Rica) 23
Volcanic hazard assessment of Guagua Pichincha (Ecuador) based on past behaviour and numerical models
F. Barberi, M. Ghigliotti and G. Macedonio (Pisa, Italy), H. Orellana (Quito, Ecuador), M.T. Pareschi and M. Rosi (Pisa, Italy) 53
Gravity study of Los Humeros caldera complex, Mexico: Structure and associated geothermal system
J.O. Campos-Enríquez and J.J. Arredondo-Fragoso (Morelia, Mexico) 69
The volcanic activity of La Soufrière of Guadeloupe (Lesser Antilles): structural and tectonic implications
J. Zlotnicki, G. Boudon and J.-L.L. Mouël (Paris, France) 91
Underground structure and magmatic activity of Izu-Oshima volcano,Japan as inferred from seismic reflection survey
H. Suzuki and K. Kasahara (Ibaraki, Japan), M.Ohtake (Miyagi, Japan), A. Takahashi, T. Ikawa, S. Abe and Y. Kawabe (Tokyo, Japan) 105
Magma flow directions inferred from preferred orientations of phenocryst in a composite feeder dike, Miyake-Jima, Japan
Y. Wada (Kobe, Japan) 119
Volatile contents of obsidian clasts in tephra from the Taupo Volcanic Zone, New Zealand: Implications to eruptive processes
N.W. Dunbar and P.R. Kyle (Socorro, N.M., USA) 127
Isotope composition of rain water, well water and fumarole steam on the Island of Vulcano, and their implications for volcanic surveillance
C. Capasso, G. Dongarrà, R. Favara, S. Hauser and M. Valenza (Palermo, Italy) 147
Rheology and microstructure of magmatic emulsions: theory and experiments
D.J. Stein and F.J. Spera (Santa Barbara, Calif., USA) 157
New measurements of SO_2 flux at Poás Volcano, Costa Rica
R.J. Andres (Houghton, Mich., USA), J. Barquero (Heredia, Costa Rica) and W.I. Rose (Houghton, Mich., USA) 175
Across-arc variation of lava chemistry in the Izu-Bonin Arc: identification of subduction components
Y. Tatsumi, M. Murasaki and S. Nohda (Kyoto, Japan) 179
Dusty and honeycomb plagioclase: indicators of processes in the Uchino stratified magma chamber, Izu Peninsula, Japan
T. Kawamoto (Kyoto, Japan) 191
Geochemistry of waters in the Valley of Ten Thousand Smokes region, Alaska
T.E.C. Keith and J.M. Thompson (Menlo Park, Calif., USA), R.A. Hutchinson (Yellowstone N.P., Wyo., USA) and L.D. White (Menlo Park, Calif., USA) 209
Mass transfer constraints on the chemical evolution of an active hydrothermal system, Valles caldera, New Mexico
A.F. White (Menlo Park, Calif., USA), N.J. Chuma (Berkeley, Calif., USA) and F. Goff (Los Alamos, N.M., USA) 233
Fluorine and boron geochemistry of an ensialic marginal basin volcano: Deception Island, Bransfield Strait, Antarctica
J.L. Smellie (Cambridge, UK), A. Hofstetter and G. Troll (Munich, Germany) 255
A geochemical model for fumaroles of the Mutnovsky volcano, Kamchatka, USSR
Yu.A. Taran, V.P. Pilipenko, A.M. Rozhkov and E.A. Vakin (Petropavlovsk-Kamchatsky, USSR) 269

0377-0273/92/$05.00 © 1992 Elsevier Science Publishers B.V. All rights reserved.

Nonequilibrium flow in volcanic conduits and application to the eruptions of Mt. St. Helens on May 18, 1980,and Vesuvius in AD 79
F. Dobran (Pisa, Italy) 285
Chemical composition of natural deep and shallow hydrothermal fluids in the Larderello geothermal field
V. Duchi and A. Minissale (Firenze, Italy) and M. Manganelli (Grosseto, Italy) 313
Geothermal assessment of the island of Ischia (southern Italy) from isotopic and chemical composition of the delivered fluids
C. Panichi and L. Bolognesi (Pisa, Italy), M. R. Ghiara (Napoli, Italy), P. Noto and D. Stanzione (Napoli, Italy) 329
A porous-flow model of flank eruptions on Mount Etna
M. Bonafede and E. Boschi (Bologna, Italy) 349
Two examples of subaqueously welded ash-flow tuffs: the Visean of southern Vosges (France) and the Upper Cretaceous of northern Anatolia (Turkey)
J.-L. Schneider (Strasbourg, France), C. Fourquin and J.-C. Paicheler (Reims, France) 365

Book Reviews
Mafic Dykes and Emplacement Mechanisms, by A.J. Parker, P.C. Rickwood and D.H. Tucker (Editors) — S. Self.... 385
Mantle Convection, Plate Tectonics and Global Dynamics. The Fluid Mechanics of Astrophysics and Geophysics, Vol. 4, by W.R. Peltier (Editor) — W.R. Jacoby 387
Volcanic Hazards: Assessment and Monitoring, by J.H. Latter (Editor) — D. Dzurisin 388
Volcanoes, by R. Decker and B. Decker — P.E. Baker 390

Erratum 392
Announcement — Call for Papers 392